



**Co-Chairperson: Jim McKenna, Port of Portland**  
**Co-Chairperson: Bob Wyatt, NW Natural**  
**Treasurer: Fred Wolf, Legacy Site Services for Arkema**

June 11, 2008

Chip Humphrey  
Eric Blischke  
U.S. Environmental Protection Agency, Region 10  
805 SW Broadway, Suite 500  
Portland, OR 97205

**Re: Pacific Lamprey Assessment (Lower Willamette River, Portland Harbor Superfund Site, USEPA Docket No: CERCLA-10-2001-0240)**

Dear Chip and Eric:

In your letter of May 19, 2008 you directed the Lower Willamette Group ("LWG") to assess Pacific lamprey at the individual organism level "as described in the February 15, 2008 Problem Formulation for the Portland Harbor Ecological Risk Assessment." On May 29, 2008, you agreed to extend the LWG's deadline for dispute resolution regarding that directive until June 18, 2008 to allow an opportunity for the LWG to discuss this with EPA and obtain clarification on what EPA's directive entailed. Thank you for providing that additional time.

Based on technical discussions with EPA, the LWG understands that EPA's directive to perform an individual risk assessment for Pacific Lamprey requires the elements set out in Attachment A. The LWG does not believe assessment at the individual level is required under EPA's risk assessment guidance, and it believes that assessment of lamprey on a population level will appropriately identify remedial measures necessary for their protection. However, if EPA confirms that Attachment A accurately describes what is being required, the LWG will carry out that assessment and will not invoke dispute resolution. It is very important that LWG receive EPA's written verification prior to the dispute deadline of June 18.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jim McKenna", written over a light blue circular stamp.

Jim McKenna  
LWG Co-Chair

A handwritten signature in blue ink, appearing to read "Bob Wyatt", written over a light blue circular stamp.

Bob Wyatt  
LWG Co-Chair

cc: Confederated Tribes and Bands of the Yakama Nation  
Confederated Tribes of the Grand Ronde Community of Oregon  
Confederated Tribes of Siletz Indians of Oregon  
Confederated Tribes of the Umatilla Indian Reservation  
Confederated Tribes of the Warm Springs Reservation of Oregon  
Nez Perce Tribe  
Oregon Department of Fish & Wildlife  
United States Fish & Wildlife  
Oregon Department of Environmental Quality  
LWG Legal  
LWG Repository

## Attachment A – Elements of “Individual Level” Lamprey Risk Assessment

1. Lamprey is being assessed as a target ecological receptor for the detritivorous fish assessment endpoint. The environmental value to be protected is as stated in the February 15 Draft BERA Problem Formulation, specifically:

*“Detritivorous fish provide an important source of food for other fish species, birds and mammals. As such, it is important to evaluate the effects of COPCs on this group of ecological receptors.”*

2. The assessment will use only the two measurement endpoints specified in EPA’s February 15, 2008 Draft BERA Problem Formulation under Assessment Endpoint 8 – Survival and Growth of Detritivorous Fish.
  - a. Detritivorous fish measurement endpoint 1: water exposure contaminant concentrations compared to AWQCs or TRVs
  - b. Detritivorous fish measurement endpoint 2: fish tissue contaminant data (field collected) compared to tissue residue TRVs
3. Tissue residue TRVs protective of the organism level of biological organization will be based on the 5<sup>th</sup> percentile of LOAEL species sensitivity distributions for COPCs for which a species sensitivity distribution (SSD) can be developed. For chemicals with an insufficient amount of residue-effects data to permit development of an SSD, the tissue TRV will be derived from the lowest available residue having an ecologically relevant effect on fish or other aquatic life if fish residue-effect studies are unavailable.. Empirical lamprey LC50 data obtained as part of the Portland Harbor ecological risk assessment may be presented?in the uncertainty section to argue that a higher SSD percentile is protective of ammocoetes at the organism level.
4. The lamprey ammocoete toxicity tests performed by the LWG confirm that the water quality values defined for other assessment endpoints are protective of lamprey ammocoetes at the organism level. Lamprey LC50 data may be introduced in the uncertainty section to argue that higher water quality values are protective of ammocoetes at the organism level.
5. Per the February 15 Draft BERA Problem Formulation reproduction is not part of the assessment endpoint for detritivorous fish. It may be argued in the uncertainty section that TRVs based on reproductive effects are not relevant to the assessment endpoint.
6. Only field collected water exposure contaminant concentrations will be used to assess measurement endpoint 1. Neither predicted pore water nor predicted surface water concentrations will be used in the BERA.
7. No additional data are needed to complete a satisfactory organism level lamprey BERA, because the field collected lamprey ammocoete tissue contaminant data provide an integrative line of evidence for assessing lamprey ammocoete exposure to contaminants in Portland Harbor.
8. No adjustment will be made to the empirical tissue residue data. The data will be assumed to be adequately representative of tissue residues in individual ammocoetes.

9. The lamprey ammocoete tissue contaminant data collected upstream of Portland Harbor will be used in the risk characterization as background data.